II.   CLAIM AMENDMENTS

1.   (Currently Amended) A method of suppressing noise in a signal containing noise ~~to provide a noise suppressed signal~~, comprising:

~~in which an estimate~~ estimating ~~is made of~~ the noise;

~~and an estimate~~ estimating ~~is made of~~ speech together with a fraction of incoming noise~~,~~; and

generating a noise reducing filter by using~~wherein the~~ the estimate of speech together with the fraction of the incoming noise ~~is used to generate a noise reducing filter~~.

2.   (Cancelled)

3.   (Previously Presented) A method according to claim 1 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.

4.   (Previously Presented) A method according to claim 3 in which the level of the noise in the estimate of the speech together with some noise provides an acceptable level of context information.

5.   (Previously Presented) A method according to claim 1 in which the level of the noise in the estimate of the speech together with the fraction of the incoming noise is below the mask limit of the speech and so is not audible to a listener.

6.   (Previously Presented) A method according to claim 1 in which the level of noise in the estimate of the speech together with the fraction of the incoming noise

approaches the mask limit of the speech and so some noise context information is left in the signal.

7. (Previously Presented) A method according to claim 1 further comprising producing a gain co-efficient for noise suppression in which a first estimation of the gain co-efficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

8. (Previously Presented) A method according to claim 7 in which the estimated noise is power spectral density.

9. (Previously Presented) A method according to claim 7 in which the first estimation is used to update the estimated noise.

10. (Previously Presented) A method according to claim 1 in which the estimate of speech together with the fraction of the incoming noise is estimated to have a noise level lower that the noise level in the signal containing noise.

11. (Previously Presented) A method according to claim 1 in which during generation of the noise reducing filter, a reducing factor is applied to reduce the noise level of the estimate of speech together with the fraction of the incoming noise relative to the noise level in the signal containing noise.

12. (Previously Presented) A method according to claim 1 in which the noise reducing filter is a Wiener filter.

13. (Cancelled)

14. (Currently Amended) A noise suppressor for suppressing noise in a signal containing noise, ~~to provide a noise suppressed signal~~ comprising:

a noise estimator to make an estimate of the noise;

and a reduced noisy speech estimator to make an estimate of speech together with a fraction of the incoming noise; and

a noise reducing filter generator to use the estimate of speech together with the said fraction of the incoming noise to generate a noise reducing filter.

15.   (Cancelled).

16.   (Previously Presented) A noise suppressor according to claim 14 in which the level of the noise included in the estimate of the speech together with the fraction of the incoming noise is variable so as to include a desired amount of noise in the noise suppressed signal.

17.   (Previously Presented) A noise suppressor according to claim 14 in which the level of the noise the estimate of the speech together with the fraction of the incoming noise provides an acceptable level of context information.

18.   (Previously Presented) A noise suppressor according to claim 14 in which the level of the noise in the estimate of the speech together with the fraction of the incoming noise is below the mask limit of the speech and so is not audible to a listener.

19.   (Previously Presented) A noise suppressor according to claim 14 in which the level of noise in the estimate of the speech together with the fraction of the incoming noise approaches the mask limit of the speech and so some noise context information is left in the signal.

20.   (Previously Presented) A noise suppressor according to claim 14 in which the estimate of speech together with the fraction of the incoming noise is estimated to have a noise level lower that the noise level in the signal containing noise.

21.   (Previously Presented) A noise suppressor according to claim 14 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with the fraction of the incoming noise relative to the noise level in the signal containing noise.

22.   (Previously Presented) A noise suppressor according to claim 14 in which the noise reducing filter is a Wiener filter.

23.   (Previously Presented) A noise suppressor according to claim 14 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

24.   (Currently Amended) A communications terminal comprising:

a noise suppressor for suppressing noise in a signal containing noise ~~to provide a noise suppressed signal~~, the noise suppressor comprising:

a noise estimator to make an estimate of the noise: ~~and~~

a reduced noisy speech estimator to make an estimate of speech together with a fraction of the incoming noise, and

a noise reducing filter generator to use the estimate of speech together with the fraction of the incoming noise to generate a noise reducing filter.

25.   (Previously Presented) A communications terminal according to claim 24 which is mobile.

26.   (Previously Presented) A communications terminal according to claim 24 which is fixed.

27.   (Cancelled)

28.   (Previously Presented) A communications terminal according to claim 24 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.

29.   (Previously Presented) A communications terminal according to claim 24 in which the level of the noise in the estimate of the speech together with fraction of the incoming noise provides an acceptable level of context information.

30.   (Previously Presented) A communications terminal according to claim 24 in which the level of the noise in the estimate of the speech together with the fraction of the incoming noise is below the mask limit of the speech and so is not audible to a listener.

31.   (Previously Presented) A communications terminal according to claim 24 in which the level of noise in the estimate of the speech together with the fraction of the incoming noise approaches the mask limit of the speech and so some noise context information is left in the signal.

32.   (Previously Presented) A communications terminal according to claim 24 in which the estimate of speech together with the fraction of the incoming noise is estimated to have a noise level lower that the noise level in the signal containing noise.

33.   (Previously Presented) A communications terminal according to claim 24 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with some noise relative to the noise level in the signal containing noise.

34.   (Previously Presented) A communications terminal according to claim 24 in which the noise reducing filter is a Wiener filter.

35.   (Previously Presented) A communications terminal according to claim 24 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.

36.   (Currently Amended) A communications network comprising:

   a noise suppressor for suppressing noise in a signal containing noise to provide a
      noise suppressed signal, the noise suppressor comprising:

   a noise estimator to make an estimate of the noise; ~~and~~

   a reduced noisy speech estimator to make an estimate of speech together with
      a fraction of the incoming noise;~~,~~ and

   a noise reducing filter generator to use the estimate of speech together with the
      fraction of the incoming noise to generate a noise reducing filter.

37.   (Cancelled)

38.   (Previously Presented) A communications network according to claim 36 in which the level of the noise included in the estimate of the speech together with some noise is variable so as to include a desired amount of noise in the noise suppressed signal.

39.   (Previously Presented) A communications network according to claim 36 in which the level of the noise in the estimate of the speech together with the fraction of the incoming noise provides an acceptable level of context information.

40.   (Previously Presented) A communications network according to claim 36 in which the level of the noise in the estimate of the speech together with the fraction of the incoming noise is below the mask limit of the speech and so is not audible to a listener.

41.   (Previously Presented) A communications network according to claim 36 in which the level of the noise in the estimate of the speech together with the fraction of the incoming noise approaches the mask limit of the speech and so some noise context information is left in the signal.

42.   (Previously Presented) A communications network according to claim 36 in which the estimate of speech together with the fraction of the incoming noise is estimated to have a noise level lower that the noise level in the signal containing noise.

43.   (Previously Presented) A communications network according to claim 36 in which the noise reducing filter generator, during generation of the noise reducing filter, is adapted to apply a reducing factor to reduce the noise level of the estimate of speech together with the fraction of the incoming noise relative to the noise level in the signal containing noise.

44.   (Previously Presented) A communications network according to claim 36 in which the noise reducing filter is a Wiener filter.

45.   (Previously Presented) A communications network according to claim 36 comprising a gain coefficient computation block in which a first estimation of the gain coefficient is made adaptively and this first estimation is used to produce a noise estimation which is then used to produce a second estimation of the gain function.